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SYNOPSIS OF THE NORTH AMERICAN HYPOCREACEÆ, WITH DESCRIPTIONS OF THE SPECIES.

BY J. B. ELLIS AND B. M. EVERHART.

(Continued from page 69.)

67. HYPOMYCES TRANSFORMANS, Pk. 29th Rep. New York State Mus., p. 57. On *Cantharellus cibarius* which it transforms into an irregular mass. New York (Peck), Massachusetts (S. J. Harkness), Pennsylvania (Everhart).

Subiculum effused, variable in color, pallid, golden-yellow, ochraceous or brick-red; perithecia ovate or subglobose, papillate, sunk in the subiculum; ostiola prominent, obtuse, amber or orange; asci cylindrical; sporidia fusiform, apiculate at each end, somewhat rough, continuous or rarely with the endochrome obscurely divided, colorless, 33—38 μ long.

68. HYPOMYCES GEOGLOSSI, E. & E. On *Geoglossum (glabrum)*? Newfield, N. J., September, 1876. Occupying the greater part of the hymenium of the host, the proper fruit of which is mostly suppressed.

Perithecia immersed, subglobose (75—80 μ), subangular from mutual pressure; ostiola papilliform, black; asci clavate-cylindrical, subsessile, yellowish, 75—80 x 6—7 μ, containing eight crowded, subbiseriate, clavate-oblong, continuous, hyaline, 6—8 x 2½—3 μ, sporidia. The subiculum appears to be obsolete, the perithecia being immersed in the hymenium of the host. As no notes were taken on the fresh specimens, the color of the perithecia can not be certainly stated, but in the dry specimens, they are nearly or quite black.

69. HYPOMYCES XYLOPHILUS, Pk. Bull. Tor. Bot. Club, XI, p. 28.

Subiculum effused, whitish; perithecia numerous, crowded, small yellowish, with a blunt ostiolum; asci cylindrical, 90—112 x 6—7½ μ; sporidia continuous, uniseriate, subfusiform, 15—17 x 5—6 μ. On decaying wood. Ohio (Morgan).

70. HYPOMYCES HYALINUS, Schw. Syn. Car., No. 35. On *Russula fœtens*. Carolina (Schw.)

Effused, thin, glabrous, hyaline-fuscous, roughened with the crowded, dark-colored ostiola; asci cylindrical, 8-spored; sporidia elliptic-fusoid, 15—20 x 4½—5 μ, uniseriate, continuous, greenish-hyaline.

** *Sporidia uniseptate.*

71. HYPOMYCES LATERITIUS, Fr. On the hymenium of several species of *Lactarius*. New England (Murray & Sprague), Carolina, on *Lactarius Indigo* (Ravenel), Potsdam, N. Y. (Ellis).

The mycelium forms a dense, white, felt-like stratum, which finally becomes more compact and of a pale brick color; perithecia spherical or subovate, abundant, sunk in the stroma, except their slightly prominent, smooth, brownish ostiola; asci cylindrical, 200—250 μ long, spore-bearing part 112 x 6—7 μ; sporidia uniseriate, elongate-fusiform, uniseptate, acuminate at each end, yellowish-hyaline, 18—20 x 4—4½ μ.

72. HYPOMYCES AURANTIUS, Pers. On *Stereum* and on the under side of logs. Carolina. (Ravenel.)

Perithecia gregarious, subsphæroid, their apices projecting from the effused, orange-colored subiculum; asci cylindrical, 8-spored, 110—140 x 6 μ; sporidia uniseriate, uniseptate, fusoid, with the ends subapiculate, slightly curved, nearly smooth, 15—24 x 5—6 μ, hyaline. The white mold, *Diplocladium minus*, Bon., is said to be its conidial stage.

73. HYPOMYCES LACTIFLUORUM, Schw. Syn. Car., No. 34. On *Lactarius*, especially *L. piperatus*. Carolina (Ravenel), Pennsylvania (Everhart), New Jersey (Ellis).

In the affected specimens of *Lactarius*, the gills are entirely obliterated, so that the hymenium of the *Agaric* presents an even, orange-colored suface in which the subglobose perithecia are thickly bedded with only their slightly prominent reddish ostiola visible; asci long and slender; sporidia uniseriate, fusiform, straight or slightly curved, rough, hyaline, 1-septate, cuspidate, pointed at the ends, 30—38 x 6—8 μ. The general appearance is much the same as that of the preceding species, but it differs in its larger, rough, warted sporidia and the absence of the felt-like mycelium. In decay, the color changes to a purplish red.

74. HYPOMYCES ROSELLUS (A. & S.) Consp., p. 88, tab. 7, fig. 3. On various decaying fungi and on the ground or on leaves and rubbish near where fungi have decayed. Pennsylvania (Michener & Everhart). Plainfield, N. J. (Meschutt).

Mycelium lax, effuse, consisting of loosely-woven threads, at first white and bearing conidia (*Tricothecium agaricinum*, Bon.), then deep rose-color or nearly blood-red; perithecia deep rose-red, subspherical or ovoid, of variable size, buried in the stroma, except the projecting, rather obtuse papilliform ostiolum; asci linear, 150 x 6—7 μ, with eight uniseriate, narrowly lanceolate, apiculate, straight or slightly curved, hyaline, 22—37 x 5—7 μ sporidia, nucleate or spuriously 1—3-septate and often subinequilateral.

Dr. C. B. Plowright, in his valuable monograph of this genus in Grevillea, Vol. XI, says: "There are two varieties of this species, one with larger, pointed perithecia, as figured by Greville and by Albertini & Schweinitz; the other, with smaller and more obtuse perithecia. The sporidia vary a good deal in size, as does the color of the subiculum, which is sometimes nearly absent. Sometimes it is almost white, but mostly rose colored, with a whitish margin." The specimens from Mr. Meschutt were on decaying leaves, forming little patches ½—1 cm. across.

75. HYPOMYCES OCHRACEUS, Pers. On decaying *Agaricus*. Pennsylvania (Michener).

Perithecia crowded, subglobose, yellowish, immersed, with a short, thick, obtuse, exserted ostiolum; subiculum (*Verticillium agaricinum*, Cda.) at first white, then straw-colored, ochraceous and yellow; asci cylindrical, 25—30 x 6½ μ, containing eight oblong-lanceolate, uniseptate, constricted, 35 x 6½ μ sporidia, which are mucronate at each end.

76. HYPOMYCES ASTEROPHORUS, Tul. Parasitic on *Nyctalis*. Carolina. (Ravenel.)

Perithecia originating in an effused, byssoid stroma, in which they are thickly strewn, ovoid or sphæroid, narrowed above into a more or less elongated neck, with an acute, pervious, ciliate ostiolum, pale, yellowish-brown, subhyaline, 150 μ high by 70—90 μ broad; asci broadly ovate, abruptly attenuated below, 40—50 x 18—20 μ, containing 4—6 narrowly lanceolate, slightly curved, mucronate at each end, 1-septate, subhyaline, then dirty-yellow, 25—35 x 6 μ sporidia.

Dr. Plowright, in his monograph already cited, says: "The perithecia of this species of *Hypomyces* differ considerably from those of the other members of the genus. They are formed of very large polygonal cells, which become elongated and parallel where they form the ostiolum and are formed by the intertwining of the dilated and convoluted bases of the conidial-bearing hyphæ that compose the stroma. These (the perithecia) are most frequently found upon the inside of the stem of the *Nyctalis*, but they are by no means of common occurrence."

77. HYPOMYCES TOMENTOSUS, Fr. Found on same *Agaric*. Berkeley. Notices of N. Am. Fungi, in Grevillea IV, p. 15.

Of this species, but little appears to be known. It is stated by Cooke, in Grevillea XII, p. 80, that the asci are cylindrical and the sporidia lanceolate, mucronate at each end, uniseptate, hyaline and 42—50 x 6—7 μ.

78. HYPOMYCES INSIGNIS, B. & C. Fungi Mexico, No. 6, p. 424.

Red; mycelium effused; perithecia oblong, more deeply colored; sporidia fusiform, apiculate at each end, 37 μ long, spuriously 1-septate, hyaline. On the hymenium and pileus of *Cantharellus*, which it covers with a red stratum and obliterates the gills. In Mexico, near Orizaba (Botteri).

The above is copied from Saccardo's Sylloge, Vol. II, p. 472, and is all we know of this species. From the brief description, one might suppose that this and *H. transformans*, Pk., are the same.

79. HYPOMYCES TEGILLUM, B. & C. Grev. IV, p. 15. "On pine. Carolina. (Ravenel).

"Perithecia ovate, rufous-brown, scattered, a continuous white mycelium, like thin parchment."

80. HYPOMYCES FLAVESCENS, Schw.

Perithecia gregarious, distinct, globose-ovate, papillate, whitish, covered with a villose coat that finally disappears, seated on a milk-white, broadly effused, pubescent subiculum; asci cylindrical; sporidia narrowly-elliptical, hyaline (uniseptate)? On hymenium of some resupinate *Polyporus*. Pennsylvania (Schweinitz.)

81. HYPOMYCES PANNOSUS, Schw.

Stroma effused, whitish, shaggy, thin, margin fimbriate-cottony; perithecia semi-immersed, pale, with dark-colored, punctiform ostiola; asci cylindrical; sporidia (?) On rotten wood. Ex. Herb. Schw. The descriptions of this and the preceding species are taken from Grevillea XII, p. 80, and were, apparently, made from specimens in Herb. Berkeley. They are not in Schw. Synopsis N. Am. The *H. pannosus* here described is said to be a different thing from the *Sphæria pannosa*, Fr.

In the next two species, the fructification is unknown.

82. HYPOMYCES TUBERICOLA, Schw. Syn. N. Am., No. 1192. On an old "White Tuber" infesting the outer bark. Found at Pocono, Pa.

Effused, thin, brown-black, margin scarcely determinate; perithecia at first subimmersed, finally erumpent ("omnino prominulis"), brown-black, rugose tuberculate, minute, subconic, densely crowded, at length collapsing. The interior of the perithecia is said to be entirely similar to that of the preceding species, *i. e.*, *H. Lactifluorum*, etc. Whether the "White Tuber" is an old specimen of *Pachyma cocos* is uncertain.

83. HYPOMYCES BOLETICOLA, Schw. Syn. N. Am., No. 1494. Found but seldom on very much decayed *Polyporus citrinus*, at Bethlehem, Pa. Allied to *H. aurantia*, Fr., but distinguished by its paler color, by the character of the subiculum (stroma) and shape of the perithecia; subiculum effused, interrupted, of loose texture, with irregular spaces ("plagis irregularibus"), pale orange with the margin whitening out; perithecia only partially immersed. conic-ovate, more or less scattered at first, colored like the stroma, at length orange-red, rather soft, papillate, easily separating from the stroma, leaving small cavities, contents of the perithecia very white, at length oozing out and remaining attached to the ostiola like a white villous pubescence.

MYCOGONE CERVINA, Ditm, which is found on *Helvella* and on various decaying *Pezizas* and *Asterophora Pezizæ*, Cda., on *P. hemispherica*, both of which are found here, are, with several similar molds, regarded as the conidial stage of different species of *Hypomyces*, of which the ascigerous stage has not been found.

GEN. VI, POLYSTIGMA, PERSOON.—(Moug. et Nest. No. 270). Stroma subcarnose, effused, colored (ochraceous, red or yellow), phyllogenous; perithecia immersed; asci 8-spored; sporidia ovoid, continuous, hyaline.

84. POLYSTIGMA RUBRUM (PERS.), D. C.

(*Xyloma rubrum*, Pers. Syn., 105; *Dothidia rubra* (Pers.), Fr. S. M., 553.) Hypophyllous, suborbicular, slightly convex, 2—4 millim. across, with an even margin, red, at length darker; perithecia (cells) small, immersed, reddish; ostiola impressed, punctiform, becoming more prominent; asci clavate, 8-spored; sporidia ovoid, subobtuse, straight, subhyaline, 10 x 6 μ. The spermogonial stage is *Libertella rubra*, Bon. Spermatia filiform, uncinate, 30 μ long. On living leaves of several species of *Prunus* (*P. domestica*, *P. spinosa*). In Saccardo's Sylloge, the species is credited to this country, but we are not aware by whom or where collected.

85. POLYSTIGMA (?) BUMELIÆ, Schw.

(*Dothidea Bumeliæ*, Schw. Syn., N. Am., No. 1884.) Epiphyllous on living leaves of *Bumelia oblongifolia*, found in the Arkansas region by Nuttall. Stroma orbicular, large ¾ cm. and over, ovate or of somewhat irregular shape, conspicuous on both sides of the leaf, on the upper side brick-red and somewhat shining as if varnished, paler and without any varnished appearance below; perithecia (cells) few, scattered, minutely pseudo-ostiolate and subprominent.

GEN. VII, NECTRIA, Fries — Perithecia carnose-membranaceous, mostly bright colored, cæspitose and generally seated on a subcarnose stroma (tubercularia); sporidia oblong or fusoid, hyaline.

A. *Sporidia continuous.*

* *Asci polysporous* (*Chilonectria*).

86. NECTRIA CUCURBITULA, Curr.

Perithecia cæspitose, orange-red, nearly smooth, at length collapsing; ostiolum papilliform, minute; asci clavate-cylindrical, 75—100 x 10—12 μ, filled with countless minute sporidia, 2—3 (mostly 2½ μ) x 1—1¼ μ. In the early stages of growth, the asci contain 2—4 cylindrical bodies about 3 μ thick and varying in length from 15 μ to nearly the entire length of the asci. These elongated bodies are subundulate and often appear distinctly multiseptate with the septa either running square across or with their ends a little curved so as to give the appearance of a series of hyaline, subglobose sporidia, but finally these cylindrical bodies are filled with the minute sporidia, which at length fill the entire cavity of the asci. Sometimes, instead of the elongated bodies, some of the asci will be seen to contain one or two series of faintly-outlined, subglobose cells, which, aiso, are at length filled with the minute sporidia and disappear. The peculiarity here noted has been observed in all the specimens on coniferous trees thus far examined and we fancy we see the same structure in the *N. cucurbitula*, issued by Fries in his Sclor. Suec., which we have had the opportunity of examining. On *Pinus rigida* and *P. strobus*, Newfield, N. J., and on *Abies balsamea*, West Chester, Pa. According to Saccardo, in Sylloge, found also on various deciduous trees.

87. NECTRIA CORYLI, Fckl.

Perithecia cæspitose, erumpent, smooth, subastomous, dark red, collapsing when dry, not differing in appearance from those of the preceding species, unless in being of a deeper shade of red; asci clavate, 75—100 x 10—12 μ, mostly filled with minute sporidia, exactly as in the preceding species, but some contain cylindric-fusoid (sporidia) ? 1-septate, 10—15 x 2½—3 μ, with a short, curved apiculus at each end. These fusoid sporidia, lying in two or three series in the asci, are so arranged with their contiguous ends in contact as to resemble, closely, the cylindrical bodies mentioned in the preceding species and, like those, are often seen filled, more or less completely, with the minute, oblong sporidia. This species is found exclusively on bark and limbs of deciduous trees. According to Dr. Rehm, the specimens in N. A. F., 159, belong here. We are inclined to think that *N. Coryli*, Fckl., is only a form or var. of *N. cucurbitula*, Curr., which is restricted in its habitat to coniferous trees as *N. Coryli* is to deciduous trees. There are three *Nectrias* with the specific name *cucurbitula*, of which the one already described is now recognized by mycologists as *N. cucurbitula*, Curr., while another species (on conifers) with oblong biconoid, 1-septate sporidia is known as *N. cucurbitula*, Tode., and still another, with oblong-fusoid, 5—6-septate sporidia, is known as *Nectria* (*Caionectria*) *cucurbitula*, Fr. We are not aware that these last two species have yet been found in this country.

88. NECTRIA INAURATA, B. & Br.—We have seen no American specimens of this species, and copy the following description from Cooke's Hand-book:

"Cæspitose; perithecia globose, then depressed, at length brown, tinged with red, frosted with yellow; ostiola papilliform, at length impressed, naked, black-brown; asci and sporidia of two kinds—some clavate, with numerous small, curved sporidia, others cylindrical, with eight elliptical sporidia, appendiculate at each end. The larger asci are clavate, containing curved, minute sporidia, not exceeding 3½ μ. The smaller cylindrical asci contain eight elliptical, 1-septate sporidia, 12½—15 μ long, furnished with a delicate, hyaline appendage at each end."

It is to be noted that the above-quoted description of the fruit applies well to that of *N. Coryli*, Fckl., and the specimens of *N. inaurata*, in Saccardo's Mycotheca Veneta, No. 1446 (which are the only ones we have examined), do not differ, as far as we can see, either in the perithecia or the fructification, from the specimens in N. A. F., 159, which (see Dr. Rehm) are *N. Coryli*, Fckl.

B. *Sporidia uniseptate; asci 8-spored.*

89. NECTRIA CINNABARINA, Tode.

Stroma (*Tubercularia vulgaris*, Tode,) pulvinate, subhemispheric, subcarnose, yellowish, conidiiferous; perithecia cæspitose, vermilion-red, at length darker, rough, with a papilliform ostiolum; asci clavate-

cylindrical, subattenuated above, 75—90 x 8—11 μ; sporidia sub-biseriate, oblong, obtuse at each end, uniseptate, straight or slightly curved, hyaline, 12—15 x 5—7 μ. On limbs of various deciduous trees. Common.

90. NECTRIA RIBIS, Tode.

Stroma and perithecia much the same as in the preceding species, except that the latter are rather smoother and the sporidia mostly longer, 13—20 x 4—6 μ (mostly about 16 x 4—4½ μ). We have examined the specimens in Vize's Micro-fungi Britannici, 153, and in Plowright's Sphæriacei Britannici, 211, and the slight differences indicated above are all we can see to separate this from *N. cinnabarina*. Specimens on gooseberry twigs sent from Canada by Prof. Macoun agree well with the English specimen, only the sporidia are rather narrower, mostly not over 4 or 4½ μ. The Canada specimens are the only ones we have seen collected here, and we do not see it mentioned by Berkeley in his North Am. Fungi in Grevillea.

91. NECTRIA RUBICARPA, Cke. Grev. VII, p. 50.

"Cæspitose, red, scarcely papillate, obtusely verrucose-roughened; asci cylindrical, 65—75 x 6—7 μ; sporidia uniseriate, elliptical, uniseptate, 10—12 x 4—4½ μ, mostly not much constricted. Looks like a miniature red raspberry, both in the clusters and individual perithecia, the latter becoming eventually nearly even." On dead limbs of *Gelsemium*. So. Carolina (Ravenel). In our copy of Rav. F. Am., the specimen (No. 341) has the perithecia distinctly collapsed. In his diagnosis of his *Ascomycetes*, under No. 337, Dr. Rehm refers the specimens of *Nectria punicea*, Kz. & Schm., in N. A. F., No. 80, to *N. rubicarpa*, Ck. We have carefully compared the N. A. F. specimens with *N. rubicarpa*, in Rav. F. Am., and they seem to us to be the same thing. Referring to our exsiccati, we find in Plowright's Sph. Brit., No. 206, a specimen labeled *N. punicea*, Kz. & Schm., in which the perithecia are not collapsed and the sporidia 15—19 x 4—5 μ, which are about the measurements given in Sylloge. The specimen of *N. punicea* in Roumeguere's Fungi Gallici, No., 1465, we can not distinguish from *N. cinnabarina*, Fr. If the specimen of *N. punicea* in Plowright's Sph. Brit. is authentic, the N. A. F. specimens can hardly be that species, having most of the sporidia less than 12 μ long, but the N. A. F. specimens agree better with the original description of *N. punicea* in their collapsed perithecia than do those in Sphæriacei Britannici. We have then, for the present, to leave the matter in doubt. The specimens in N. A. F., 772, do not appear to be *N. rubicarpa*, Cke.

92. NECTRIA COCCINEA, Pers.

Perithecia cæspitose, ovoid, smooth, bright red, papilliform, about one fifth millim. in diam., usually not collapsing, seated on a yellowish, slightly erumpent stroma, which is often nearly obsolete; asci subcylindrical, 80—95 x 6—7 μ; sporidia uniseriate, uniseptate, hyaline or nearly so, scarcely constricted, rather acutely elliptical, 12—15 x 4½—5 μ (12—16 x 5—7, Sacc.) On bark of various deciduous trees. Common.

93. Nectria Russellii, B. & C. Grev. IV, p. 45.

"Cæspitose, red, inclining to brown; ostiolum papilliform, at length sunk from collapsing; sporidia cymbiform, uniseptate, 15—20 μ long. On elm, New England, Russell." *Var Magnoliæ*, Sacc., differs somewhat from the type in its shorter (10—11 x 5—6 μ) sporidia, slightly constricted, with the lower cell a little narrower and the perithecia at length collapsing. On bark of *Magnolia*, So. Ca. (Ravenel).

94. Nectria offuscata, B. &. C. Grev. IV, p. 45.

"Cæspitose, dingy, dark, brown-red, minutely granulated, ostiolum depressed; asci clavate; sporidia biseriate, oblong, about one fourth as broad as long; externally resembing *N. Russellii*. On *Hibiscus*. South Carolina."

95. Nectria ditissima, Tul.

Perithecia densely gregarious, small, subglobose, bright red, vertically collapsed when prematurely dried; ostiolum papilliform, minute; asci clavate, about 80 μ long and 8—10 μ broad above, contracted below into a slender base; sporidia crowded, biseriate, fusoid-oblong, 1-septate, slightly curved, 14—16 x 4—4½ μ. On dead *Acacia*. So. Ca. (Ravenel), on *Melia*, Louisiana (Langlois).

96. Nectria verrucosa, Schw. Syn. N. Am. 1401.

Perithecia cæspitose, ovate-globose, verrucose-roughened, pale red, not collapsing, about ⅓ millim. in diam., seated on an orange-red, depressed, globose, substipitate stroma (*Tubercularia*), forming groups 1—2 millim. in diam.; asci oblong-cylindrical, with a short, substipitate base, 60—70 x 10—12 μ; sporidia biseriate, oblong, uniseptate, 12—16 x 4—5 μ. The stroma, as in most other *Nectrias*, is finally hidden and partially obliterated by the perithecia. Common on *Morus* and Sassafras, Pennsylvania (Schweinitz), on *Morus*, *Melia*, etc., So. Ca. (Ravenel) and on *Morus*, N. Jersey (Ellis). Differs from *N. cinnabarina* in the peculiar roughening of the perithecia and in its shorter asci and mostly narrower sporidia. *N. coccinea* has the perithecia nearly smooth or when dry slightly furfuraceous.

(To be continued.)

NOTES ON FLORIDA FUNGI.--No. 6.

BY W. W. CALKINS, CHICAGO, ILLINOIS.

My observations, thus far, justify the opinion that not many species are to be found in the pine woods section nor on the *genus Pinus*. Even dead trees and limbs are singularly bare of this order. This may be due to the resinous properties of the pine and also to the fact that pine woods are generally open, admitting much light and sunshine. In part, also,

the soil—or rather *sand*—is dry and remains so, no undergrowth, except young pines, springing up. *Lenzites sepiaria*, Fr. seems to be the favored denizen of the dead pine and not abundant. This rule holds good in places where the pine grows along with hard wood species and is then not gregarious, as in the pine barrens proper. I have examined numbers of fallen pines in both situations, and can only report, besides the above, a very few specimens of *Irpex* (?) and of *Polyporus carneus*, the latter a resupinate form and so rare that I have never found over one half dozen specimens. In the absence of other support, the pine becomes, in the struggle of the Fungi for existence, a dernier resort, and it seems a poor one. Where the soil is such as to produce a growth of hard wood—and thirty or forty species on a few acres is not uncommon—there will be found all the conditions of shade, dampness and decay, so necessary to the prolific development of the great family we are considering.

TWO NEW SPECIES OF CYLINDROSPORIUM.

BY J. B. ELLIS AND W. A. KELLERMAN.

CYLINDROSPORIUM TRADESCANTIÆ, E. & K.—On living leaves of *Tradescantia Virginica*. Manhattan, Kans., June, 1886. (Kellerman, 837.) Conidia erumpent in little flesh-colored heaps, cylindric-vermiform, a little narrower at one end, 65—80 x 4—5 μ, 4—6-septate (granular and nucleate at first); hyphæ obscure, nearly obsolete. The affected leaves are stained purplish.

CYLINDROSPORIUM ANGUSTIFOLIUM, E. & K.—On living leaves of *Yucca angustifolia*. Manhattan, Kans., June, 1886. (Kellerman, 838.) Spots amphigenous, oval, $\frac{1}{2}$—$\frac{3}{4}$ x $\frac{1}{4}$ cm., yellowish-brown, with a darker border; acervuli erumpent, olivaceous, covered by the cuticle for some time; conidia scarcely distinguishable from those of the preceding species; hyphæ simple, short, consisting of two or three concatenated cells of the proligerous layer. The general appearance is that of *Phoma concentricum*.

SKETCH OF JOHN F. BEAUMONT.*

BY THOS. M. PETERS, A. M., MOULTON, ALA.

PROF. JOHN F. BEAUMONT, according to his own account, was born in the state of Pennsylvania, about 1825. He died at Troy, in Henry county, Ala., about the end of the late civil war. In size, manners and conduct, as well as name, he was a Canadian Frenchman, but he did not

This interesting account of Prof. Beaumont was sent me some months ago with the request that I "construct" from it a sketch for publication in the JOURNAL. No abridgment seemed necessary, and, besides, it would lose much if it did not appear in the form in which Judge Peters himself furnished it. K.

speak or read French. He said he was of a German family and raised in that state. He spoke and read German with ease and fluency. His education was fair. He was a fair mathematician, read Latin well, had picked up a little Greek so as to comprehend the Greek nomenclature in science. He was intelligently instructed in the scientific curriculum of the time. He discussed, understandingly, most scientific subjects, and was a most earnest enthusiast in botany, in all its branches. I first met him about 1852 in the family of the late Judge D. Ligon, at Mountain Home, in Lawrence county, Ala. He was residing there as a private teacher in Judge Ligon's family, who had been my partner in the practice of law, in Moulton, Ala. The Judge told me I would like him, as his tastes were very much like my own. I became acquainted with him, and found him intelligent and an invaluable assistant in the whole field of natural science. I invited him to my office. I told him I had Fries' works on Funguses and Lichens, and Prayer's Botanical Mycology, which I had imported. He was very much surprised that we could get such books from France and Sweden, away here in the middle of the forest. I told him we did not live in the forest: we lived with Nature, and God regulated it. and where intelligence existed, there was no forest! Ignorance made forests and the devil ruled them. In nature, the heavens were stretched out over us for a temple, and if we had pure hearts and enlightened minds, we would sit in it, always near the Father, and pray to him between the Cherubim in the Holy of Holies, besides a great deal more of the same sort. Next Sunday, he walked seven miles to visit me at my office and examine my books and specimens. I gave him Prof. Edw. Tuckerman's elegant description of lichens, and he was ready to fall down and worship him. I also permitted him to examine some of his preparations. After that he called Tuckerman "The Master." I had the photographs of Prof. Tuckerman, of Rev. Dr. M. A. Curtis and Mr. Ravenel. I introduced him to them. He said they were all "Masters," and he would straitway fall in love with them. I told him to them love was help, and what they needed was his assistance. I showed what I was doing and had been doing. That was what these distinguished scientists most needed. Henceforth he became their correspondent and so continued up to his death, as will be seen in their various publications.

I did not then know a mycological botanist in all the South outside this little circle. To-day they may be gathered in hosts. And now all are gone, save Prof. Tuckerman, Mr. Ravenel and myself, and we have, all of us, about passed over the Biblical limitation, and must soon follow the rest, for —

"There is no discharge in that war."

Prof. Beaumont, in the early part of 1855, joined Dr. Bowen, as a missionary of the Baptist church, in Africa, and remained there some time, and then returned to this state, where he resided at or near Troy, Henry county. He taught school in South Alabama. Mrs. Jas. Thorngton, daughter of Chief Justice Chilton and wife of Col. Thorng-

ton, a distinguished lawyer, of Montgomery, Ala., told me he had taught in her father's family about the end of the civil war and taught her Latin. But after Prof. Beaumont went to South Alabama, I did not meet him again, though we continued to correspond. He was a good man and a good citizen and a sincere and pure Christian, but not much of a creedist. He loved science, in all its vast field, with the zeal and fidelity of an enthusiast, and his death was a real loss to our science.

NEW LITERATURE.

BY W. A. KELLERMAN.

"British Sphæropeideæ,—Species hitherto found in the British Islands." By M. C. Cooke, Grevillea, June, 1886.

"Fungi of New Guinea." By M. C. Cooke. l. c.

"Fungi-Hunting in Spring, II." By W. B. Grove, B. A. *Midland Naturalist*, June, 1886.

"Studies on the Contagious (bacterial) Diseases of Insects." By S. A. Forbes. Bulletin Illinois State Laboratory of Natural History, Vol. II, article IV.

"Cucurbitaria Laburni auf Cytisus Laburnum." Von Dr. Karl Freiherrn von Tubeuf. Botanisches Centralblatt, No. 21–4, 1886.

"How to collect certain plants." By A. P. Morgan, Chas. H. Peck, H. W. Ravenel, A. B. Seymour, E. W. D. Holway, William Trelease, W. G. Farlow, and others. Botanical Gazette, June, 1886.

In the several articles under the above heading, directions for collecting and preserving fleshy fungi, as Hymenomycetes, etc., are given by Messrs. Morgan, Peck and Ravenel; Parasitic Fungi, Uredineæ, etc., by Messrs. Seymour and Holway; Bacteria, Schizomycetes, by Prof. Trelease; Yeast, Saccharomycetes, by Dr. Farlow.

"Fungi Exotica, III." Von Dr. Georg Winter. Hedwigia, Maerz bis Juni, 1886.

In this article are described twenty-eight new species, collected by Mr. Moller, inspector of the botanical garden at Cornibra. Among them are three species of *Asterina* and ten species of *Meliola*. Dr. Winter is at present working up, monographically, these two genera, examining "in den *original* exemplaren," figuring and describing fully all the species known. The new genus described is as follows:

Molleriella, Winter, n. gen.—Apothecia superficialia, membrenacea, minutissima, e basi sterili bulbosa, peritheciiformi et hymenophora convexo, hemispherico-companuliformi formata. Hymenophorum ascos numerosos, inordinate conglobatos, hyphis sterilibus, tenuissimus intermixtos, globosos gerens, epithecio crasso, celluloso, fusco obtectum. Sporæ oblongæ, transverse pluriseptatæ, hyalinæ.

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